

Fig. 4

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graph TD
    Start([SLEEP PROCESSING]) --> S10{S10: SLEEP PROCESSING IS PERMITTED?}
    S10 -- NO --> End([END])
    S10 -- YES --> S11[S11: I/O MONITORING PROCESSING]
    S11 --> S12{S12: EXTERNAL CONDITION DETECTED WITHIN MONITORING TIME?}
    S12 -- YES --> S20[S20: TIMER RESET]
    S20 --> S12
    S12 -- NO --> S13[S13: CPU SLEEP PROCESSING]
    S13 --> S14{S14: EXTERNAL CONDITION DETECTED?}
    S14 -- YES --> S18[S18: CPU ACTIVE PROCESSING]
    S18 --> S12
    S14 -- NO --> S15{S15: CLOCK FORWARD/BACK ADJUSTMENT TIME?}
    S15 -- NO --> S14
    S15 -- YES --> S16[S16: CPU ACTIVE PROCESSING]
    S16 --> S17{S17: PRESET TIME ELAPSED?}
    S17 -- YES --> S15
    S17 -- NO --> S19[S19: TIMER RESET]
    S19 -.-> S18
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The flowchart illustrates the sleep processing routine. It begins with a start point labeled "SLEEP PROCESSING". A decision diamond (S10) asks "SLEEP PROCESSING IS PERMITTED?". If the answer is "NO", the process ends at "END". If "YES", it proceeds to a process block (S11) labeled "I/O MONITORING PROCESSING". From S11, it enters a loop starting with decision diamond (S12) "EXTERNAL CONDITION DETECTED WITHIN MONITORING TIME?". If "YES", it goes to process block (S20) "TIMER RESET" and loops back to S12. If "NO", it proceeds to process block (S13) "CPU SLEEP PROCESSING". From S13, it enters another loop starting with decision diamond (S14) "EXTERNAL CONDITION DETECTED?". If "YES", it goes to process block (S18) "CPU ACTIVE PROCESSING" and loops back to S12. If "NO", it proceeds to decision diamond (S15) "CLOCK FORWARD/BACK ADJUSTMENT TIME?". If "NO", it loops back to S14. If "YES", it proceeds to process block (S16) "CPU ACTIVE PROCESSING". From S16, it enters a third loop starting with decision diamond (S17) "PRESET TIME ELAPSED?". If "YES", it loops back to S15. If "NO", it goes to process block (S19) "TIMER RESET", which then loops back to S18 via a dashed line.